Amendments to the Claims

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) A heat exchanger comprising:

a continuous, cornerless strand of helicoidal conduit defining a plurality of loops spaced along an axis, said loops defining a plurality of gaps therebetween;

a plurality of fins and said plurality of fins are spaced apart at regular intervals with one another throughout the circumference of said heat exchanger; and

each of said fins being attached to said conduit at a plurality of locations including at least two of said loops such that each of said fins cross at least one of said plurality of gaps;

wherein each of said fins extends radially ~~substantially to~~ beyond an outer extent of said strand of conduit.

4. (Withdrawn) The heat exchanger according to claim 3, wherein said fin is continuous.

5. (Previously Presented) The heat exchanger according to claim 3, wherein said fin is comprised of fin segments.

6. (Previously Presented) The heat exchanger according to claim 3, said helicoidal-shaped conduit having an open core and further comprising a blower apparatus having an impeller rotably mounted within said core.

7. (Previously Presented) The heat exchanger according to claim 3, further comprising a blower apparatus whose impeller is rotably mounted around said helicoidally shaped conduit.

8. (Previously Presented) The heat exchanger according to claim 3, wherein the loop of the said helicoidally shaped conduit has a configuration selected from the group consisting of circular, elliptical and lenticular.

9. (Cancelled)

10. (Withdrawn) The heat exchanger according to claim 3, wherein said helical conduit forms a first winding and said fin forms a second winding, and wherein said first and second windings alternate in an axial direction.

11. (Previously Presented) The heat exchanger according to claim 3, wherein said fin includes a plurality of openings and said conduit passes through at least one opening of said plurality of openings.

12. (Previously Presented) The heat exchanger according to claim 10, wherein said plurality of openings are formed by a plurality of through-holes equal to the number of helicoidal conduit turns in a longitudinal direction of said plurality of fins and said through-holes receive said conduit.

13– 19. (Cancelled)

20. (Withdrawn) A helicoidal tube heat exchanger comprising:

a tube adapted to receive and to output a first working fluid;

said tube being substantially continuously helical such as to define at least one interval space between at least two loops of said tube; and

a fin in thermodynamic communication with said tube and bridging said at least one interval space, said fin being substantially non-perpendicular to said conduit at said contact.

21 - 22. (Cancelled)

23. (Withdrawn) The helicoidal tube fin heat exchanger according to claim 20, said helical tube having an open core and further comprising a blower apparatus having an impeller rotably associated with the said tube.

24 – 25. (Cancelled)

26. (Previously Presented) The helicoidal tube fin heat exchanger according to claim 3, where the fin surface is selected from the group consisting of plain, perforated, louvered, slotted, wavy, and spine.

27. (Cancelled)

28. (Previously Presented) The heat exchanger according to claim 3, said helicoidal shaped conduit having an open core and further comprising a fan apparatus having an impeller mounted over said core.

29. (Withdrawn) A heat exchanger, comprising:

a conduit wound as a spiral strand having a helicoidal shape, said helicoidal shape having substantially no straight portions and no corners, wherein the helicoidally shaped conduit has a plurality of loops; and

a fin in contact with and extending between said loops, said fin being substantially non-perpendicular to said conduit at said contact.

30. (Cancelled)

31. (Withdrawn) The heat exchanger according to claim 3, wherein said fin is substantially non-perpendicular to said conduit at said attachment.

32. (Cancelled)

33. (Previously Presented) The heat exchanger according to claim 3, wherein said helicoidal conduit has a noncircular cross section.

34. (Previously Presented) The heat exchanger according to claim 3, wherein a first working fluid flows inside the helicoidal conduit and said heat exchanger or said fin is disposed such that a second working fluid flows substantially perpendicular to the said axis over said conduit and fins.

35. (Withdrawn) The heat exchanger of claim 5 wherein each of said fin segments touches an adjacent fin segment.

36. (Previously Presented) The heat exchanger of claim 3 wherein the loop of helicoidally shaped conduit is substantially circular.

37. (Previously Presented) A heat exchanger, comprising:

a continuous, cornerless strand of helicoidal conduit of noncircular cross section defining a plurality of loops spaced along an axis, said loops defining a plurality of gaps therebetween;

with a plurality of thin plate fins spaced apart at regular intervals with one another attached throughout the entire 360°, said fins being at a fixed angle to the said axis to said conduit at a plurality of locations including at least two of said loops such that at least one fin crosses at least one of the said plurality of gaps;

with the first working fluid flowing inside the helicoidal conduit and the second working fluid flowing substantially perpendicular to the said axis over the said conduit and fins.

38. (Previously Presented) The heat exchanger of claim 3 wherein each of said fins crosses at least one of said gaps.

39. (New) A heat exchanger comprising:

a continuous, cornerless strand of helicoidal conduit defining a plurality of loops spaced along an axis, said loops defining a plurality of gaps therebetween;

a plurality of fins and said plurality of fins are spaced apart at regular intervals with one another throughout the circumference of said heat exchanger; and

each of said fins being attached to said conduit at a plurality of locations including at least two of said loops such that each of said fins cross at least one of said plurality of gaps <u>that allow for the radial flow of the outside fluid</u>;

wherein each of said fins extends radially ~~substantially to~~ beyond an outer extent of said strand of conduit.